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fate of chlorinated compounds in the feedstock, and the technology applied to clean the synthesized hydrocarbons. Dr Burt Davis <a href="Mailto:davis@noah.caer.uky.edu>replied on Tue Jan 8 17:02:18 2002: 'I assume that you are referring to the facility that has been proposed by Global. If that is the case I have a general understanding of what is proposed. Many of the issue[s] that you raise are very complex and would in many cases be specific to the specific facility.' The results of the research cannot be directly applied other BG/L IGCC facilities that do not use MSW. The constituency of the feedstock, the combustion chemistry, the gas cleaning processes, and the resultant exhaust gases and slag will all vary significantly from facilities that just use coal. The value of Trapp as a research facility for Clean Coal is questionable.

DOE has acknowledged that it is normally responsible for a comprehensive review of alternative sites, and that by choosing to partner with Global Energy, the parent company of KPE, they feel relieved of that responsibility. There are several points to be addressed, however. In addition to the comments below, please consider the *Unreliable Partners* section.

Global Energy has other sites in various stages of construction using BGL based IGCC technology. They are a CCT partner in a nearly identical IGCC plant burning coal since December 1995 in Indiana. They are putting an IGCC plant identical to Trapp in Lima Ohio.

To not consider these sites is improper-it is the same partner. The alternate sites appear to satisfy all stated goals of DOE & the CCT projects. Some may use 100% coal which makes them more valuable as CCT demonstrations sites than one that only uses 20% coal. There may well be other sites as well: DOE & the CCT program have IGCC partners as far away as Kazahkstan.

The fuel cell component of the Trapp demonstration is a fraction of 1% of the total energy production. It has already been demonstrated using sulfur-cleaned coal-based syngas. It is a modular technology that could be added to practically any current IGCC facility, and certainly to the Lima plant.

If MSW derived materials are to comprise 80% of the feedstock, sites closer to the source of the MSW need

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Comment No. 10 Issue Code: 22

Before any federal funds are obligated, KPE will have to provide proof of finances for construction and operation of the project.

Comment No. 11 Issue Code: 13

The relatively small amounts and generally dispersed nature of MSW in Kentucky does not economically support exclusive utilization of Kentucky generated MSW to produce RDF supplies. Importing RDF from a densely populated metropolitan area is more economically viable in order to supply the necessary amount of RDF required to operate the plant.

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Comment No. 12 Issue Code: 16

Detailed plant design is not available or necessary at this point because the project is still in the planning stage. It will not be available until after the issuance of the ROD. All assumptions made in conducting the analyses are detailed in the EIS.

<sup>8</sup> Appendix E. APPLICATION OF BGL GASIFICATION OF SOLID HYDROCARBONS FOR IGCC POWER GENERATION 2000 Gasification Technologies Conference San Francisco, California October 8-11, 2000 Presented by: GLOBAL ENERGY INC.

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consideration. Energy prices are higher anywhere else in America, offering a better reward for siting elsewhere.

Without a thorough site review, it is impossible to establish whether the advantages offered by EKPC at Trapp are the best deal for the DOE & the public, or if Federal money is even needed to accomplish the goals presented by the DOE & EPA.

DOE and their current partners may better achieve their mandated goal of demonstrating CCTs at a different BG/L IGCC facility. They should be compelled to make that review. More importantly, DOE may be able to avoid spending taxpayers' dollars altogether while still managing to demonstrate coal based CCTs. It is a serious omission of this DEIS to neglect that opportunity.

Flawed Premises: 'No Action Alternatives'
There is good evidence provided by testimony before the
PSC that the DEIS' Alternative 2 needs repair. EKPC's
commitments, both present and future, are not accurately
established. In the event that they are not as
represented in the DEIS, the DEIS needs revision &
subsequent public review.

Page S-8 describes the three alternatives analysed under this DEIS. The action described as Alternative 2 has been challenged by at least two documents. As well, personal communication with residents of the community of Trapp suggest that Alternative 2 may already be under construction, changing it's status from 'option' to fact.

On July 11, 2001, East Kentucky Power Co-Op (EKPC) amended its permit application before the Kentucky Public Service Commission (PSC) because KPE had not met its financial closing deadline of June 30, 2001. Due to the delay in KPE's financing, East Kentucky 'decided that it cannot reasonably rely on that project to satisfy its future power supply needs.' Therefore, EKPC has concluded that it should proceed to construct a 250 MW coal-fired generating unit at the Hugh I. Spurlock power station in Mason County, Kentucky'. This facility should be included as part of the DBIS Alternative 2.

The original NOI from DOB for Trapp includes the following: 'Under the no-action alternative, DOE would not provide partial funding for the design, construction, and operation of the project. In the absence of DOE funding, the Kentucky Pioneer IGCC Demonstration Project probably would not be constructed.' Together, the two

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4/14 (cont.)

5/18 (cont.)

<sup>9</sup> Appendix D, Minutes of the Kentucky Public Service Commission, Case # 2001-053, September 26, 2001 10 DBPARTMENT OF ENERGY Notice of Intent To Prepare an Environmental Impact Statement for the Kentucky Pioneer Integrated Gasification Combined Cycle Demonstration Project, Trapp, KY and Notice of Floodplain Involvement. 10th day of April, 2000. David Michaels, Assistant

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> citations above suggest that all derived components of the DETS that address Alternative 2 need to address the 250 Mw Mason County facility, and perhaps exclude the alternative as it is now written.

There may or may not be a natural gas fired power island at Trapp already under construction. This may be construction of some peaker units, however. If it is a fact that EKPC has already committed to building the power island, then it is not an 'alternative' but instead, an extant facility and should be dropped from the alternative section of the DBIS and added to the Cumularius Impacts. The residence of Traph maintain that Cumulative Impacts. The residents of Trapp maintain that some construction is already underway.

The Proposed Action section may also need review. EKPC's commitment to the KPE IGCC facility is still contingent on future agreements, and that the DOE's Cooperative Agreement with KPE may be undone in the future by disagreements between KPE & EKPC & the PSC. In September, EKPC testified before the PSC that even 'In the event that KPE is able to secure project financing, East Kentucky stated that certain provisions in the existing purchase power agreement would have to be revised and any renegotiated contract will be resubmitted to the Commission for its prior approval.

The alternatives offered to the public in the DEIS and scoping process do not represent the real alternatives before them. A revision of the DEIS & a new round of scoping and public comment after the DEIS is repaired is needed.

Likely Failure to get Local Permits
Over the last 15 years, Kentucky has bootstrapped itself
into an enviable body of Solid Waste legislation. KRS
224 requires planning and management at both the state
and county level for Municiple Solid Waste (MSW) production, reduction, and disposal. This statute provides the legal foundation for local permits. It also defines MSW and Refuse Derived Fuels (RDF).

The MSW being proposed as a feedstock does not qualify under KRS 224 as an RDF, as most of the recyclables (paper & plastics) have not been recovered. See the section Conflict with State Law below for more discussion of MSW vs RDF in Kentucky. Further, under KRS 224 there is a 15% limit on RDF in the feedstock before the facility is a waste-to-energy plant requiring local

The language voiced inside the state of Kentucky that has been used to describe the facility differs from that used in the Federal dialog by DOE's corporate partners EKPC and KPE. One wonders if the goal of this contradiction

Secretary, Environment, Safety and Health. [FR Doc. 00-9301 Filed 4-13-00; 8:45 am]

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> is to avoid Kentucky law and the requisite permits from local Clark County government.

The DEIS supports the designation of Waste-to-Energy. On page 3-21, section 3.2.2.1, 'Pellet Manufacturers', it states 'Historically, the waste-to-energy industry has used RDF pellets as a means of assuring effective cofeeding at conventional power plants.' The implication is clear: using RDF is waste-to-energy.

KPE's staff are arguing that they are not burning or combusting the 2500-4000 tons/day MSW derived fuel" that comprises 50% to 80% of their plant's feedstock, and that the MSW they are using is no longer solid waste once they have removed only the glass and metals. They are leaving most recyclables in the waste stream for their BTU content, preferring to burn rather than recycle them15

It is clear to me that they are burning the fraction of MSW that vaporizes at 3200 degrees Fahrenheit, the syngas. DOE's documents frequently refer to the integrated combustion stage that drives the turbines in IGCC facilities: "...(3) combustion (emphasis mine) of the clean syngas in a turbine generator to produce the clean syngas in a turbine generator to produce electricity...". As well, it is clear that the facility is a waste-to-energy plant: "The briquettes would be made from high-sulfur coal (at least 50%) and refuse (municiple solid waste)" 13

Outside of Kentucky, Global has no problem describing the process as combustion. For example, in a description of the industrial process they state: '...sulfur recovery units prior to combustion in the gas turbines, resulting in exceptionally low SO2 emissions. "" Please compare this with Mike Musulin's (President of KPE) published

11 As proposed, KPE will transport as much as 4000 tons of municiple solid waste (MSW) per day from the East Coast to fuel the waste-to-energy facility in Trapp, Kentucky. This is an amount equal to approximately one half of Kentucky's own MSW production.

12 The sample provided by KPE for public inspection at the EPA EIS hearing on 12/11/01 in Trapp was a 10x50 mm compressed bolus made almost entirely of white paper. A comb muses is that particular sample was at least #

rough guess is that particular sample was at least %

recyclable content.

13 DOE's Notice of Intent to Prepare an Environmetal Impact Statement for the Kentucky Pioneer IGCC Demonstration Project, Trapp KY 14 Page 5, Appendix E, APPLICATION OF BGL GASIFICATION OF SOLID HYDROCARBONS FOR IGCC

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